BROHM MINING CORPORATION

P. O. Box 485
Deadwood, South Dakota 57732

August 5, 1996

Mr. Paul Sterling

Kappes, Cassiday & Associates

7950 Security Circle

Reno, NV 89506

Re: Metallurgical Consultation for the Gilt Edge Mine

As per our phone conversation, I am requesting a similar review of the operating practices and metallurgical controls as performed for Dakota's Stibnite mine. I would prefer the work be scheduled as soon as possible. It is my understanding that the terms would be the same as before, $688 per day plus reasonable expenses. Specifically the work would be as follows:

- Overall review of crusher and process circuit and general operating practices. Particular emphasize on the tonnage and grade measurement and recording protocols.
- Work with Jim Thompson, the mill superintendent and his operators in developing the leach solution application schedule and operating practices most suited for the Anchor Hill ore and permanent leach pads. The previous leaching at the site was on/off.
- Audit existing process, metallurgical, and assay controls, identifying areas needing changes or modifications and develop recommendations.
- Review the current water balance and planned water storage levels against industry standard practice.
- Review the current gold inventory reconciliation spread sheets and assist management with development or modification
- Assist management in developing a production schedule for the Anchor Hill ore reserves.
- Develop a letter report addressing observations, achievements and recommendations.

I have attached a list of materials for your review prior to arrival at the mine site. The scope of work should not exceed 14 working days. Please contact me with your schedule and any additional information required.

Sincerely,

John Trimble

General Manager

Gilt Edge Mine

(605) 578-2107 ♣ (605) 578-1709 FAX

KCA
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20 September 1996

Mr. John Trimble
Brohm Mining Corporation
Gilt Edge Mine
P.O. Box 485
Deadwood, South Dakota, 57732

Dear Mr. Trimble:

Kappes, Cassiday and Associates (KCA) was contracted in September, 1996 by Brohm Mining Corporation to review the overall process circuit and general operating practices, audit existing process controls and audit existing metallurgical controls while working hands on with Jim Thompson and the plant operators at the Gilt Edge property. The following sections discuss the review of the overall process, achievements and recommendations for possible improvements to present operations based on KCA's heap leaching experience and discussions with site personnel.

1.0 Introduction

The Gilt Edge mine is located in the northern Black Hills of South Dakota, approximately 40 miles northwest of Rapid City and 4 miles southeast of the town of Deadwood. The Gilt Edge deposit is the result of volcanic intrusions and associated hot spring activity.

Original mining focused on the Dakota Maid and Sunday oxide pits. The current mine operation is focused on Phase I of the Anchor Hill deposit and all references of the Anchor Hill ore body in this report refer to Phase I. Future mining will be directed towards Phase II of the Anchor Hill deposit upon approval of an EIS. A new leach pad site is planned for processing Anchor Hill Phase II ore. The original Dakota Maid and Sunday ore bodies contained oxide reserves that ended in a sulfide zone. Sulfide testwork was performed on a pilot plant scale and results were encouraging. As a result, sulfide ore was extracted from the original pits and stacked on cells one to seven.

The heap leach pad was divided into 7 distinct cells in order to utilize onload/unload principles. During the 1995 operating season a decision was made to convert the onload/unload heap operation to a fixed pad, based on the inability to neutralize the stacked sulfide ore. Based on the decision to make the pad a single use pad and a review of the mineable reserves for the Anchor Hill Phase I orebody, it was determined that an additional 300,000 ft^2 pad expansion was required. The pad expansion was constructed and the first ore was stacked in July 1996 designated as cell 8.

The project operates year-round by applying cyanide solution to the heap by drip emitter irrigation. Emitters are buried to a 2 feet depth in order to protect them from freezing during the winter months. The pregnant solution is collected and directed to the process facility through a series of pipes and pumps. A Merrill-Crowe process facility precipitates the precious metals using zinc dust and collects the precipitate in two plate and frame filter presses. The precipitate is dried and smelted to produce a final doré.

2.0 Process Review

2.1 Crushing Plant

The mined ore from the Dakota Maid and Sunday pits was size reduced by a two stage crushing circuit to a nominal size of 1.5 inches, based on metallurgical testwork. Metallurgical testwork on the Anchor Hill oxide ore, performed by McClelland Laboratories, showed that stage crushing to a nominal 3/4 inch particle size would recover 80% of the gold.

The current crushing plant operation produces a nominal product size passing 3/4 inch at a production rate of 150,000 tons per month. Sampling of crushed product is achieved by a conveyor cross-belt sampling system that feeds a four-way splitter to produce four separate sample products. Lime is added to the final crushed product stream at a rate of 2.0 pounds per ton of ore and increased periodically to 3.0 pounds per ton of ore to account for the co-mingling of stacking run-of-mine material that has not been conditioned with lime.

The crusher product sampling frequency is set for a 30 minute time interval. A review of the daily fire assay results showed little variance between duplicates and suggests that the sampling frequency is adequate.

The daily crusher sample is screened in the laboratory for verification that the crushed product is passing the desired crush size of 3/4 inch. Fire assaying of the screen fractions was performed for the first time during the site visit by a KCA consulting engineer. The results showed that 66% of the gold was retained in the screen fraction passing 1/4 inch. This is only a single sample and it is recommended that fire assaying of the screen fractions be performed on a once-a-week basis.

Fire assay results obtained from the screen analyses indicate that the gold may be located in the fracture zones of the rock and that a coarser crush size may provide the same recovery results presently encountered with the material crushed to minus 3/4 inch. McClelland Laboratories performed coarse bottle roll tests and column leach tests on the Anchor Hill oxide material. KCA does not recommend the use of coarse bottle roll tests to determine optimum crush size since actual column test results may report higher recoveries due to not allowing sufficient time for solution to penetrate the fractures of the larger particles. KCA recommends that column tests be performed on material crushed to a nominal 1 1/2 inch and a nominal 4 inch size in order to evaluate and optimize precious metal recovery versus crush size.

Calculation of material crushed is performed by a weightometer located on the conveyor belt prior to lime addition. The weightometer has been recently calibrated by the manufacturers service representative and is stated to be within ± 0.1% accuracy. KCA recommends that a zero calibration be performed on a weekly basis and a span calibration be performed on a monthly basis to maintain the current level of accuracy.

The quantity and grade of the run-of-mine material being stacked onto the heap leach pad is calculated from pit survey data and blasthole grade determinations. If column leach test results indicate that crushing of material to a coarser size is economical, then it may be feasible to single stage crush run-of-mine ore to economically enhance recovery. Crushing run-of-mine material will also promote better control of metallurgical accounting for quantities and gold grades stacked determined from the weightometer and sampling system respectively.

2.2 Leaching/Neutralization

Crushed ore is stacked onto the leach pad by haul trucks and spread by a dozer. The surface of the heap is ripped and drip emitters are placed in the trenches at a 2 feet depth and a spacing of 32 inches square. Solution is collected at the base of each of the seven individual cells and pumped by sump pumps to a main sump collection system. Solution collected from cell 8 is directed by gravity to a newly fabricated sump that overflows into the main collection sump. Solution collected in the main collection sump is then pumped to a pregnant sump located adjacent to the surge pond. The pregnant solution is processed through the recovery plant and the barren solution is returned by gravity to the combined sump. The barren solution is then applied to the heap.

A second collection system and sump system was constructed parallel to the application system so that neutralization of leached cells could operate concurrently with leaching of adjacent cells. The neutralization solution was directed to a 13,750 ft^2 pond and treated with hydrogen peroxide to reduce cyanide concentrations in solution. The neutralized solution was then recycled back to the cell being neutralized for subsequent washing of the stacked material. Recirculation of solution was continued until residual cyanide values in the cell met environmental requirements at which time the cell was unloaded and readied for placement of new ore. Once the pad became a single use pad, neutralization of stacked ore was no longer required and the process of neutralization was discontinued.

An audit of present process control methods included reviewing flowmeter installations, estimation of active areas under leach and proposing a leaching schedule. Since the operation became a single use heap leach pad, approximately 1,000 gpm of pregnant solution is pumped to the recovery plant. The plant is not capable of operating efficiently above 750 gpm and as a result, solution is by-passing the plant and is being directed into the barren sump or surge pond.

Flowmeter installations were observed on the leach application line, the leach solution return line, the neutralization pond feed line and the neutralization solution application line. It was noted that the leach solution flowmeters were operational but were not calibrated and consequently were not being used for solution management. The neutralization flowmeters are no longer in service. Discharge solutions from cells one to seven can not be monitored accurately because solution is pumped from a corner sump located in each cell into a gravity drain pipe feeding the main collection sump.

The Gilt Edge mine has been consistently increasing the ore to pad. At the current stacking rate of 200,000 tons per month, stacking in 30 feet high lifts, using a 60 day leach cycle and a solution application rate of 0.005 gpm/ft^2, it was calculated that the required solution application flowrate would need to be 1,500 gpm over an area of 300,000 ft^2. Based on a review of the as-built area of the leach pad, the area available for active leaching on cell 8 is estimated to be 150,000 ft^2. This limitation of area available for active leaching suggests that the solution application system may be best utilized as a modified two stage leaching system to help build pregnant solution gold grades and reduce the large volume of solution reporting to the recovery plant.

The process of converting the present leaching system to a modified two stage leaching system can be accomplished by changing a few valves and making present flowmeters operational. Barren solution from the plant will be applied to the material stacked on cells one to seven at a flow of 750 gpm. Return solution will be directed through the current neutralization drain line, collected in the neutralization sump and then pumped to the neutralization pond. Solution from the neutralization pond will be pumped at 750 gpm to the new stacked ore on cell 8, collected in a separate sump and pumped to the recovery plant.

The total solution being applied to the heap leach pad will be 1,500 gpm. Results from the initial stacking of cell 8 reported a recovery of 72% after 9 days of leaching. It is concluded from the results that a 30 day leach cycle be implemented on cell 8, in order to maintain parallel stacking and leaching rates. Separation of solutions returning from cell one to seven and cell 8 will allow for tracking of recovered ounces and solution management calculations. It is not apparent what the grade returning from cells one to seven will be, but the pad should be able to produce some recoverable gold prior to being applied to the new stacked ore. Cyanide is currently being added to the barren sump and the addition point will need to be changed once the modified two stage leach cycle is operational. Cyanide will need to be added to the neutralization pond.

As the stacking of ore on cell 8 reaches the same lift height as the ore stacked on cells one to seven, third lift, the separation of solution will not be as easy because the entire pad will become a single heap. The solution will still report to two separate sumps and solution management will need to be monitored in order to maintain the 750 gpm reporting to the neutralization pond and the recovery plant. The modified two stage leaching system may not be effective when ore is stacked above the third lift, but will become extremely effective once a new expansion pad is constructed for mining Phase II of the Anchor Hill ore body.

2.3 Recovery Plant

It was noted that the recovery plant was very clean and was being operated in a professional manner. One operational problem was discussed with Jim Thompson regarding the capacity of the vacuum tower. When the leach operation became a single-use heap leach pad and the pregnant solution returning from the pad increased from the design flowrate of 750 gpm to 1,000 gpm, the vacuum tower has been unable to perform adequately at the higher flow. Zinc dust consumption has increased from 25 grams per minute to 50 grams per minute to compensate for lower gold recoveries caused by the inefficiency of the vacuum tower at the 1,000 gpm flowrate.

In order to optimize the plant flowrate at 750 gpm, excess pregnant solution returning from the heap pad is either returned to the barren sump or discharged to the surge pond. Since solution is being recycled, an opportunity may be available to implement a modified two stage leach cycle in order to maximize the gold value in the pregnant grade and reduce the solution volume returning to the processing plant. The procedure for implementing a two stage leach cycle is discussed in Section 3.2.

2.4 Laboratory

Laboratory protocol was reviewed for sample preparation procedures, fire assaying procedures and metallurgical testing procedures with Ms. Laura Damon.

Laboratory quality assurance and quality control measures were observed to meet or exceed industry standards. Ms. Damon had one concern regarding erroneous gold values being reported and suggested the possibility of coarse gold interference.

Crusher samples are being fire assayed on two separate splits in triplicate, at 1 assay ton, for a total of six results. It was noted that every so often an assay value was being reported with a large variance from the other five duplicates. Sample preparation procedures have been scrutinized and it is believed that the discrepancies may be associated with sample identification and proper reporting.

Fire assaying of screen fractions from the screen analysis of the crusher sample will provide a second gold value to check against the reported direct fire assay values. The screen analysis will help to determine if odd values being reported are representative of the sample.

The current site cyanide shake procedure was compared to the procedure used by KCA and it was determined that the only difference in the two procedures was the heating of the solution. KCA does not believe that the process for determining gold values by cyanide shake is temperature dependent. Ms. Damon will be performing cyanide shake test with heated solution versus ambient temperature solutions to determine if heating the solution is required. The overall cycle time to perform the cyanide shake test may be reduced if heating of the solution is not required.

3.0 Solution Management

The Gilt Edge project operates a 60 gpm reverse osmosis unit to remove excess solution and discharges the treated solution to the environment. Solution volumes increase during the Spring months due to the melting of the accumulated snow pack. KCA was asked to propose control measures that could be implemented to help Mr. Thompson with solution management for optimizing when to discharge solution and when to add makeup solution.

A current water balance generated by Mr. Trimble was reviewed and a solution management schedule was discussed. Water balance calculations were performed based on the average precipitation data from Mr. Trimble's water balance table, total lined area of the pad, lined area of the surge pond, lined area of the neutralization pond, a production rate of 200,000 tons per month, an ore absorption of 3% and a process plant flowrate of 750 gpm.

Two extreme water balance scenarios were investigated; accumulation of precipitation from November through April with the subsequent release of all accumulated solution in April; and the average dry month. The first scenario was investigated to determine the quantity of solution needed to be treated and discharged and the second scenario was investigated to determine the average makeup water requirements.

The resultant calculation for the accumulated average precipitation scenario estimated that 132 gpm of solution needs to be treated and discharged during the month of April. Based on the capability of the reverse osmosis unit to treat 60 gpm and the volume of solution needed to be treated, the surge difference is estimated to be 72 gpm or 3,110,000 gallons of accumulated solution over the month of April. Based on the surge pond having an effective capacity of 7,200,000 gallons, treatment of solution by the reverse osmosis equipment should commence during April.

The calculation performed for an average dry month estimates that 24 gpm or 1,040,000 gallons of makeup solution will be required on a monthly basis.

Based on the water balance estimations for the two scenarios, treating and discharge of solution should commence in April and be concluded in June for an average precipitation year. During the winter months, November to March, KCA recommends that a surge pond volume be maintained at 2,000,000 gallons to compensate for ore absorption and start treating and discharging solution in early April through to the latter part of June. Accumulation of solution should start in July in preparation of ore absorption losses incurred during the upcoming winter months. This operating scheme is based on average annual precipitation data and will change if an extremely dry year is encountered or an extremely wet year is encountered, implying less treatment required or more treatment required.

4.0 Reporting

The daily operator reporting sheets were reviewed and it was felt that no additions were required until a modified two stage leaching cycle commenced, which would require a couple more rows on the operating sheets to record sample points and totalizer flow readings.

The daily production report was reviewed and a simplified layout was drafted by Ms. Damon and myself. The general idea of the report is to present a simple table that contain the maximum amount of information. The layout followed the principle of splitting the report into three sections for daily reporting. The first section would contain the crushed ore and run-of-mine values for stacked tons, grade and ounces. The second section would contains values for heap solution flows in tons, grade and ounces. The third section would contain numbers for the recovery plant solution flows in tons, grade, ounces and the number of ounces recovered by the Merrill-Crowe process. Three similar sections would be added to the bottom of the sheet for reporting month-to-date values.

The process plant monthly gold inventory sheet was reviewed and simplified with the help of Mr. Trimble and Ms. Damon. The proposed sheet will contain crusher stockpile information, leach pad stacking information, process solution information and recovery plant information. The layout will include a beginning and ending inventory and the calculated variance. The total change in inventory will be calculated and an additional summary will be attached to the bottom of the sheet which will summarize the accounting inventory based on the year-to-date inventory.

5.0 Gold Inventory

An audit of present metallurgical accounting practices was performed in order to reconcile the ounces of gold stacked versus ounces of gold recovered. An investigation of the column and pilot plant testwork for estimating the sulfide gold ore recovery, oxide run-of-mine gold ore recovery and oxide crushed gold ore recovery was performed.

5.1 Sulfide Ore

A sulfide pilot heap leach test was performed from September 1992 to November 1993 on 46,430 tons of material crushed to minus 1/4 inch and agglomerated. Based on the pilot heap test, Brohm projected the gold recovery to be 50% and used a budgeted recovery of 47%. The budgeted recovery estimate of 47% was supported by the KCA consulting engineer, based on a review of the testwork results.

Sulfide ore was stacked on the heap in 1995. Problems neutralizing the material prompted the decision to leave the material in-place and construct a single use leach pad. A 1995 year-end inventory number of 1,380 gold ounces was calculated and was used as the starting inventory for 1996. The final stacking of sulfide ore occurred in February 1996 and stacking of oxide ore from the Anchor Hill deposit started in April 1996. It became apparent that there was a clear definition between what shipped ounces should be applied to the stacking of sulfide ore and stacking of oxide ore. Based on the reported shipped ounces, it was concluded that the sulfide ore contained no more recoverable gold ounces and that ounces shipped after 1 April 1996 were associated with the Anchor Hill oxide ore.

5.2 Run-of-Mine Ore

A recovery for run-of-mine material was estimated to be 50% based on a projected recovery from solution grades of a pilot plant heap test. A review of the data indicates that the estimated recovery may be high and that 40% may be a more appropriate number. Presently, leaching of a second pilot heap test is being performed and a 60 day leach recovery will be determined by removing approximately half the material and determining a tails gold value. A tails gold grade will be determined on the remaining material that will provide a recovery after 90 days of leaching. This current test should provide the required information needed for estimating the recovery of run-of-mine material.

Once the results from the test are reported, the budgeted gold recovery should be adjusted. The overall effect in the gold inventory number is minimal as the material is only 25% of the total material stacked during a month and the grade is low which implies that the recoverable ounces is also low.

5.3 Crushed Ore

The crushed ore indicated optimum crush size and recovery was determined from metallurgical testwork performed by McClleland laboratories and reported to be 3/4 inch and 80% respectively.

Crushed ore was stacked on expansion cell 8 starting in July 1996 and solution was applied at the beginning of August 1996. A solution application rate was calculated based on the number of drip emmitters being used, the area under leach and an application rate of 0.005 gpm/ft^2. The gold recovery from the heap after 9 days was estimated to be 72%. The results of the test support the metallurgical testwork conclusions that the ore leaches very rapidly.

Monthly column leach tests are being performed on a composite of the daily crusher samples. Results from the column testwork for May, June and July have reported gold recoveries of 84.5%, 80.8% and 85.7% respectively. The three recoveries average to 83.6%. KCA estimates that the actual heap recovery will be reduced by 3 to 4 % based on accounting for production variances. The budgeted heap gold recovery of 80% for the Anchor Hill ore crushed to a nominal size of 3/4 inch is considered to be a realistic value.

5.4 Tonnage Calculations

Tonnage is determined on the crushed ore by using a weightometer installed on the crusher product conveyor. Material stacked onto the heap is currently determined from a survey of the crushed ore stockpile, calculating a volume and adjusting the weightometer value to reflect the tons stacked. KCA recommends that the weightometer be used in conjunction with the survey to derive the tons and grade of the crushed material stacked on the heap and not the other way around.

Run-of-mine material tonnage and grade calculations are being determined by pit survey calculations and blasthole grade determinations. Unless metallurgical results from future testwork at site indicates that crushing run-of-mine material is economical, determination of stacked tonnage and ounces is best determined from mining calculations. If run-of-mine is economical at a coarse crush size then tonnage and grade values will best be derived from the installed weightometer and sampling system.

5.5 Reconciliation

From the ounces stacked estimations and the ounces of gold shipped, a reconciliation of the gold inventory was performed. Since it is being assumed that no recoverable ounces of gold remain in the sulfide material after 1 April 1996, a table was generated to determine the inventory of stacked ounces from the Anchor Hill oxide ore. The table was generated to determine the number of ounces remaining in cells one to seven and the number of ounces remaining in cell 8.

Since the solution flowrates returning from the two separate areas were not being recorded, the following assumptions were made to determine flows and solution gold values.

- A solution grade returning from cells one to seven was determined to be 0.021 oz/ton by assuming a total flow returning from the heap of 960 gpm at an average gold grade of 0.029 oz/ton and a flow of 276 gpm returning from cell 8 at an average gold grade of 0.42 oz/ton, during the nine day hydrostatic test of cell 8.

- Assuming that the grade returning from cells one to seven is held constant over the entire month at 0.021 oz/ton, the monthly pregnant solution grade is 0.032 oz/ton at a flowrate of 960 gpm, from daily operating records and the average grade returning from cell 8 is 0.042 oz/ton, solution application rates were estimated.

- Based on the solution application determinations and the solution gold grades, a ratio was estimated for ounces recovered from cells one to seven and cell 8. The ratio was then applied to the shipped ounces reported for the month and a distribution of ounces to cells one to seven and cell 8 was made.

Based on the above assumptions, a reconciliation of ounces was estimated for production of the stacked Anchor Hill oxide ore. It is estimated that the August month-end gold inventory is 3,927 ounces for the heap.

5.6 Gold Projection

KCA was asked to comment on the effectiveness of using a gold projection model to estimate the number of gold ounces to be recovered during the month. The model would then be used in conjunction with metallurgical test data in order to predict the reported ounces for each month. A projection model can be generated, but certain variables need to be incorporated.

The following list describes some of the variables required to construct a projection model.

- The projected grade and tons to be mined.
- A historical database and reconciliation of ounces stacked and recovered.
- Determine the tons of ore not under leach and used as a covering layer if drip emmitters are buried in the heap. Need to estimate when the ore will be leached.
- Need to estimate tons and grade of side slopes and determine when the ore will be leached.
- Quality control and quality assurance in determining tonnage and grade of ounces stacked onto the heap which are dependent on sufficient control and sampling of crushed product and the moisture content of the crushed ore which has inherent problems in determining true moisture values in any sampling system.
- Discrepancy in determining the tonnes and grade of the run-of-mine ore since no sampling or weighing devices are being used.
- Need to make adjustments to the model to account for delays in gold recovery encountered when leaching multiple lift heaps.
- Determine the tons and grade of material situated below the ramp and estimate when the material will be leached.

6.0 Conclusions and Recommendations

The following achievements were noted during the KCA consulting engineers site visit.

- The operation is very well managed.
- The process plant and laboratory are functioning very efficiently.
- The willingness to incorporate new ideas regarding stacking, leaching and solution management.

The following recommendations were reviewed on-site and plans are being made to implement the ideas.

- Monthly column tests should be continued to help track recoveries of ore stacked onto the heap. KCA recommends that a head and tail screen analysis be performed to help determine recoveries of each size fraction, distribution of gold within each size fraction and enable another check on the monthly gold grade stacked onto the heap.
- Column testwork on material crushed to a nominal 1 1/2 inches and nominal 4 inches be performed to help optimize crush size and recovery.
- Clean and calibrate all process flowmeters in order to track solution flows and grades for metallurgical accounting and ensure a solution application rate between 0.004 gpm/ft^2 and 0.006 gpm/ft^2.
- Implement a modified two stage leaching system, in order to maintain a stacking rate of 200,000 tons per month and reduce the pregnant solution volume needed to be treated in the recovery plant.
- Revise run-of-mine recovery based on information from the current pilot heap test and reconcile the year-to-date inventory of gold ounces.

The site visit was very enjoyable and KCA would like to thank the Gilt Edge personnel for the opportunity to work with them. If you have any further questions or concerns please call.

Best Regards,

Paul Sterling
Kappes, Cassiday & Associates

BROHM MINING CORPORATION
GILT EDGE MINE
GOLD PROJECTION MODEL - 1996

		Tonnes	Stacked Grade	Ounces	Month Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Mar	Crushed														0.00
	ROM	8460	0.019	160.70		16.07	48.21	16.07							80.35
Apr	Crushed	24480	0.032	789.59			236.88	315.84	78.96						631.67
	ROM	49628	0.017	857.70			85.77	257.31	85.77						428.85
May	Crushed	112112	0.027	2997.43				899.23	1198.97	299.74					2397.94
	ROM	880	0.014	12.30				1.23	3.69	1.23					6.15
Jun	Crushed	158230	0.023	3715.61					1114.68	1486.24	371.56				2972.49
	ROM	75270	0.013	956.19					95.62	286.86	95.62				478.10
Jul	Crushed	151015	0.023	3504.26						1051.28	1401.70	350.43			2803.41
	ROM	50092	0.012	601.00						60.10	180.30	60.10			300.50
Aug	Crushed	191513	0.024	4630.02							1389.01	1852.01	463.00		3704.02
	ROM	20693	0.015	310.40							31.04	93.12	31.04		155.20
Sep	Crushed														0.00
	ROM														0.00
Oct	Crushed														0.00
	ROM														0.00
Nov	Crushed														0.00
	ROM														0.00
Dec	Crushed														0.00
	ROM														0.00
Total					0.00	16.07	370.86	1489.68	2577.69	3185.45	3469.23	2355.65	494.04	0.00	13958.67
Shipped					0.00	480.78	969.60	2605.00	1966.52	4009.71					10031.61

		Month 1	Month 2	Month 3	Total
Recovery	ROM	10%	30%	10%	50%
	Crushed	30%	40%	10%	80%

BROHM MINING CORPORATION
GILT EDGE MINE
HOPPER STOCKPILE RECONCILIATION - 1996

	MINED			CRUSHED			STOCKPILE					
							Start Inventory			End Inventory		
Month	Tonnes	Grade Au oz/ton	Ounces	Tonnes	Grade Au oz/ton	Ounces	Tonnes	Grade Au oz/ton	Ounces	Tonnes	Grade Au oz/ton	Ounces
Jan												
Feb	48,307	0.048	2318.70	48,307	0.048	2318.70	0	0.000	0.00	0	0.000	0.00
Mar												
Apr	49,760	0.032	1604.98	29,895	0.032	964.25	0	0.000	0.00	19,865	0.032	640.73
May	124,200	0.026	3285.83	106,697	0.026	2822.77	19,865	0.032	640.73	37,368	0.030	1103.79
Jun	241,041	0.022	5302.90	171,880	0.023	4036.14	37,368	0.030	1103.79	106,529	0.022	2370.55
Jul	194,353	0.022	4275.77	143,142	0.023	3317.62	106,529	0.022	2370.55	157,740	0.021	3328.70
Aug	124,571	0.025	3058.11	192,979	0.024	4671.46	157,740	0.021	3328.70	89,332	0.019	1715.35
Sep												
Oct												
Nov												
Dec												
Total	782,232	0.025	19846.29	692,900	0.026	18130.94						

BROHM MINING CORPORATION
GILT EDGE MINE
CRUSHED PRODUCT STOCKPILE RECONCILIATION - 1996

	CRUSHED			STACKED			STOCKPILE					
							Start Inventory			End Inventory		
Month	Tonnes	Grade Au oz/ton	Ounces	Tonnes	Grade Au oz/ton	Ounces	Tonnes	Grade Au oz/ton	Ounces	Tonnes	Grade Au oz/ton	Ounces
Jan												
Feb	48,307	0.048	2318.70	48,307	0.048	2318.70	0	0.000	0.00	0	0.000	0.00
Mar												
Apr	29,895	0.032	964.25	24,480	0.032	789.59	0	0.000	0.00	5,415	0.032	174.66
May	106,697	0.026	2822.77	112,112	0.027	2997.43	5,415	0.032	174.66	0	0.000	0.00
Jun	171,880	0.023	4036.14	158,230	0.023	3715.61	0	0.000	0.00	13,650	0.023	320.53
Jul	143,142	0.023	3317.62	151,015	0.023	3504.26	13,650	0.023	320.53	5,777	0.023	133.89
Aug	192,979	0.024	4671.46	191,513	0.024	4630.02	5,777	0.023	133.89	7,243	0.024	175.33
Sep												
Oct												
Nov												
Dec												
Total	692,900	0.026	18130.94	685,657	0.026	17955.61						

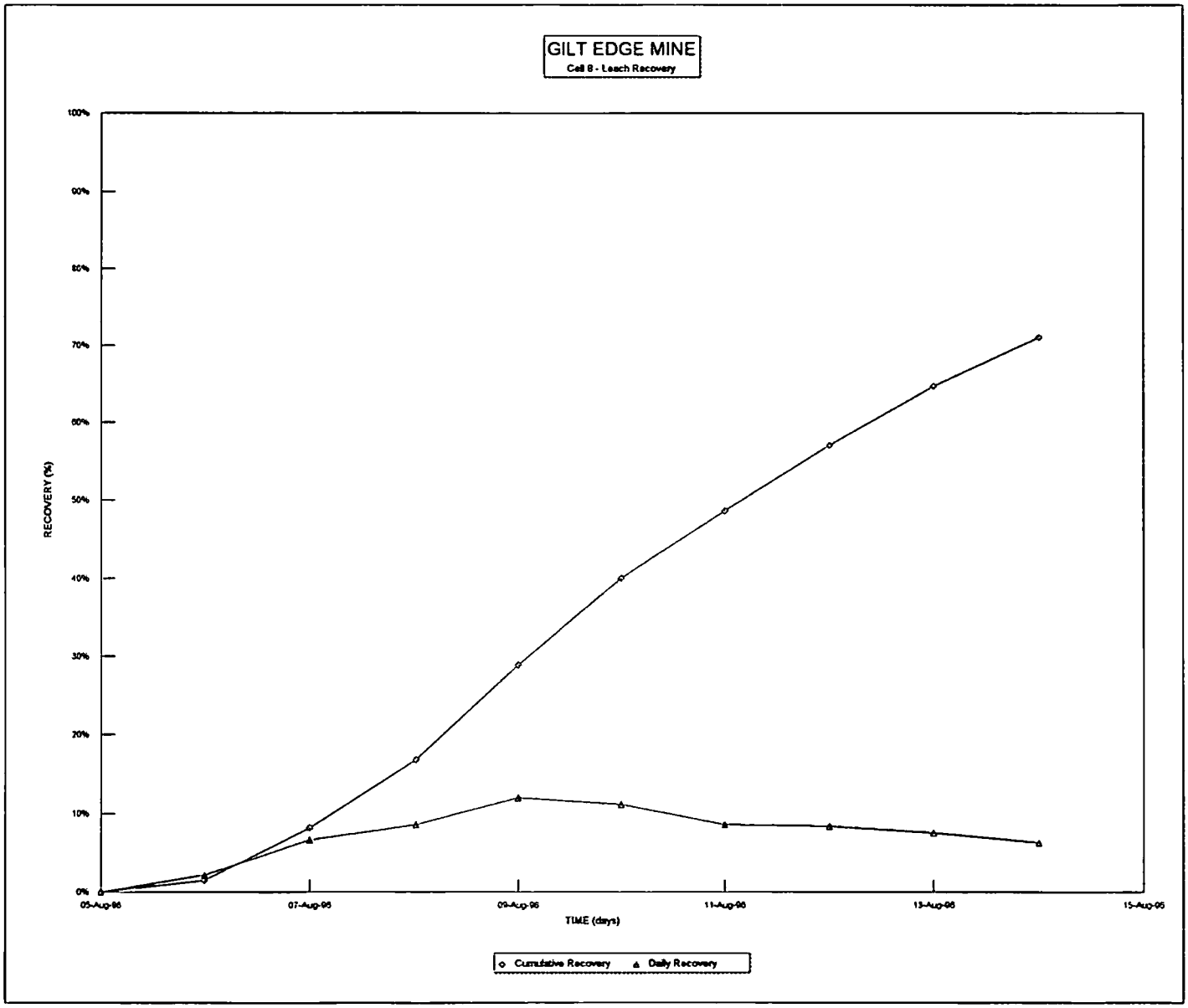
Note: Stacked ore is calculated from assuming that the crushed ore and stockpile values are correct based on weightometer readings and survey calculations.

BROHM MINING CORPORATION
CELL 8 RECOVERY ESTIMATION

Tons Loaded =	53,603
Average Grade =	0.0179997
Ounces Loaded =	964.84
Area Under Leach =	58,962.5

Assumptions
2680 tons solution loss
22 cubic feet per ton
20 feet high bench

Date	# Days On	# Emitters	Emitter GPH	Total GPM	Total TPD	Saturation Loss	Tons (OFF)	ON Au opt	OFF Au opt	ON Au oz	OFF Au oz	Oz Recovered (OFF - ON)	Cumulative Au oz	Daily Rec. (%)	CUM. Rec. (%)
08/05/96	0	8291	2	276	1,660	1,660	0	0.004	0.000	6.64	0.00	-6.64	-6.64	0.0%	0
08/06/96	1	8291	2	276	1,660	1,022	638	0.003	0.041	4.98	26.17	21.19	14.55	2.2%	1.5%
08/07/96	2	8291	2	276	1,660		1,660	0.004	0.043	6.64	71.40	64.76	79.31	6.7%	8.2%
08/08/96	3	8291	2	276	1,660		1,660	0.007	0.057	11.62	94.64	83.02	162.33	8.6%	16.8%
08/09/96	4	8291	2	276	1,660		1,660	0.010	0.080	16.60	132.83	116.23	278.56	12.0%	28.9%
08/10/96	5	8291	2	276	1,660		1,660	0.013	0.078	21.59	129.51	107.93	386.48	11.2%	40.1%
08/11/96	6	8291	2	276	1,660		1,660	0.014	0.064	23.25	106.27	83.02	469.50	8.6%	48.7%
08/12/96	7	8291	2	276	1,660		1,660	0.008	0.057	13.28	94.64	81.36	550.86	8.4%	57.1%
08/13/96	8	8291	2	276	1,660		1,660	0.006	0.050	9.96	83.02	73.06	623.92	7.6%	64.7%
08/14/96	9	8291	2	276	1,660		1,660	0.004	0.041	6.64	68.08	61.43	685.36	6.4%	71.0%
Total					**16,604**	**2,682**	**13,922**	**0.007**	**0.058**	**121.21**	**806.56**	**685.36**			



BROHM MINING CORPORATION
GILT EDGE MINE
MONTH-END INVENTORY

CRUSHER	Tons	Grade Au (opt)	Ending Inventory Au (oz)	Starting Inventory Au (oz)	Variance Au (oz)
Stockpile					

LEACH	Stacked Tons	Stacked Au (oz)	Estimated Rec. (%)	Recoverable Au (oz)	Shipped Au (oz)			
Pad 1-7, ROM								
Crushed								
Pad 8, ROM								
Crushed								

PROCESS SOLUTION	Total Volume (gallons)	(Tons)	Estimated Volume (%)	Estimated Volume (Tons)	Grade Au (opt)			
In-Plant Solution	15,000	62.6						
Surge Pond	7,200,000	30039.9						
Neutralization Pond	600,000	2503.3						

RECOVERY PLANT	Tons	Grade Au (opt)			
Carbon					
Slag					
Fire Assay					
Precipitate					

TOTAL INVENTORY			
CHANGE IN INVENTORY			

Note: Lots shipped xxx to yyy
Precipitate calculated from solution flows, grades and onces in next pour.

BROHM MINING CORPORATION
GILT EDGE MINE

DAILY PRODUCTION REPORT

HEAP

	Tons	Grade Au (opt)	Au (oz)
Ore Crushed			
ROM to Pad			

HEAP SOLUTION

	Tons	Grade Au (opt)	Au (oz)
Preg. Solution			
On-Solution (1-7)			
On-Solution (8)			
Off-Solution (1-7)			
Off-Solution (8)			

Recovery (1-7)	
Recovery (8)	

RECOVERY PLANT

	Tons	Grade Au (opt)	Au (oz)
Preg. Solution			
Barren Solution			

Recovery	

MONTH-TO-DATE PRODUCTION

HEAP

	Tons	Grade Au (opt)	Au (oz)
Ore Crushed			
ROM to Pad			

HEAP SOLUTION

	Tons	Grade Au (opt)	Au (oz)
Preg. Solution			
On-Solution (1-7)			
On-Solution (8)			
Off-Solution (1-7)			
Off-Solution (8)			

Recovery (1-7)	
Recovery (8)	

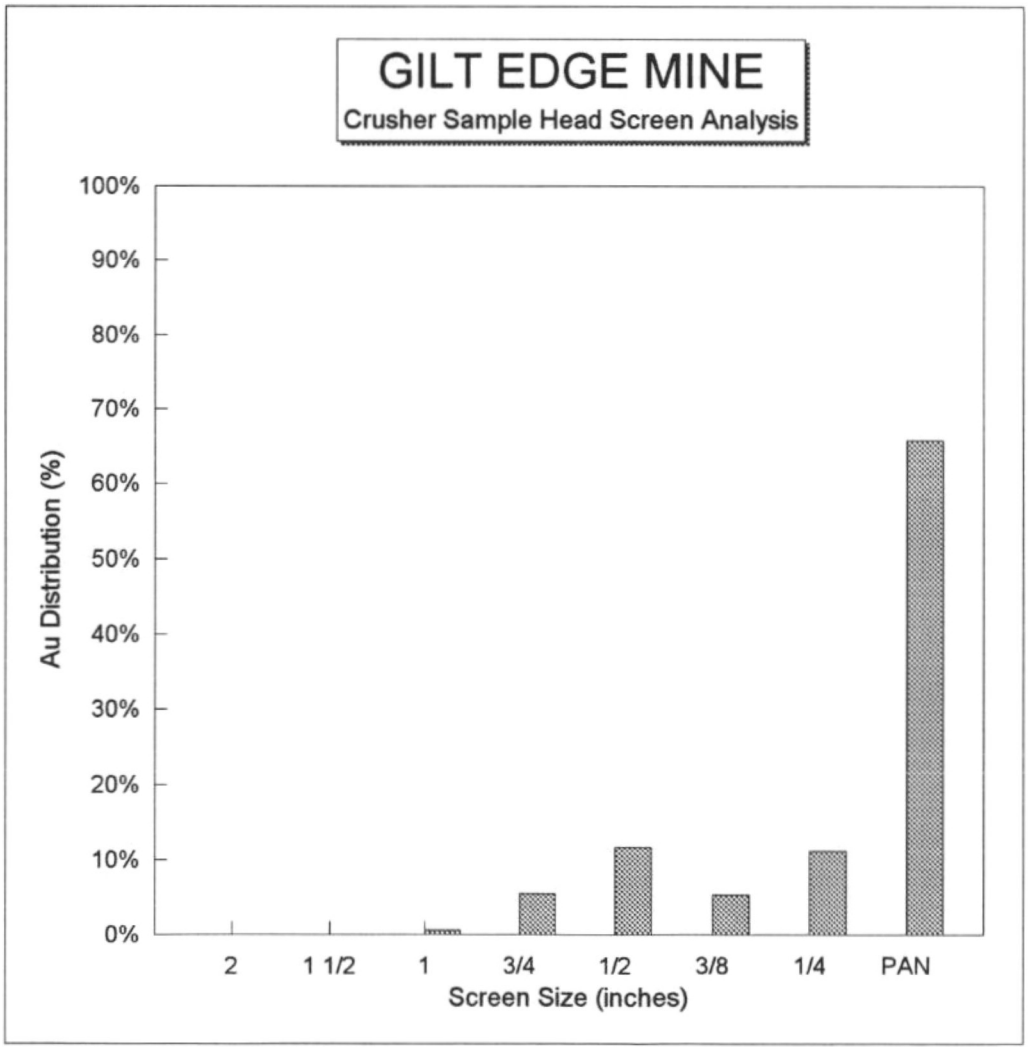
RECOVERY PLANT

	Tons	Grade Au (opt)	Au (oz)
Preg. Solution			
Barren Solution			

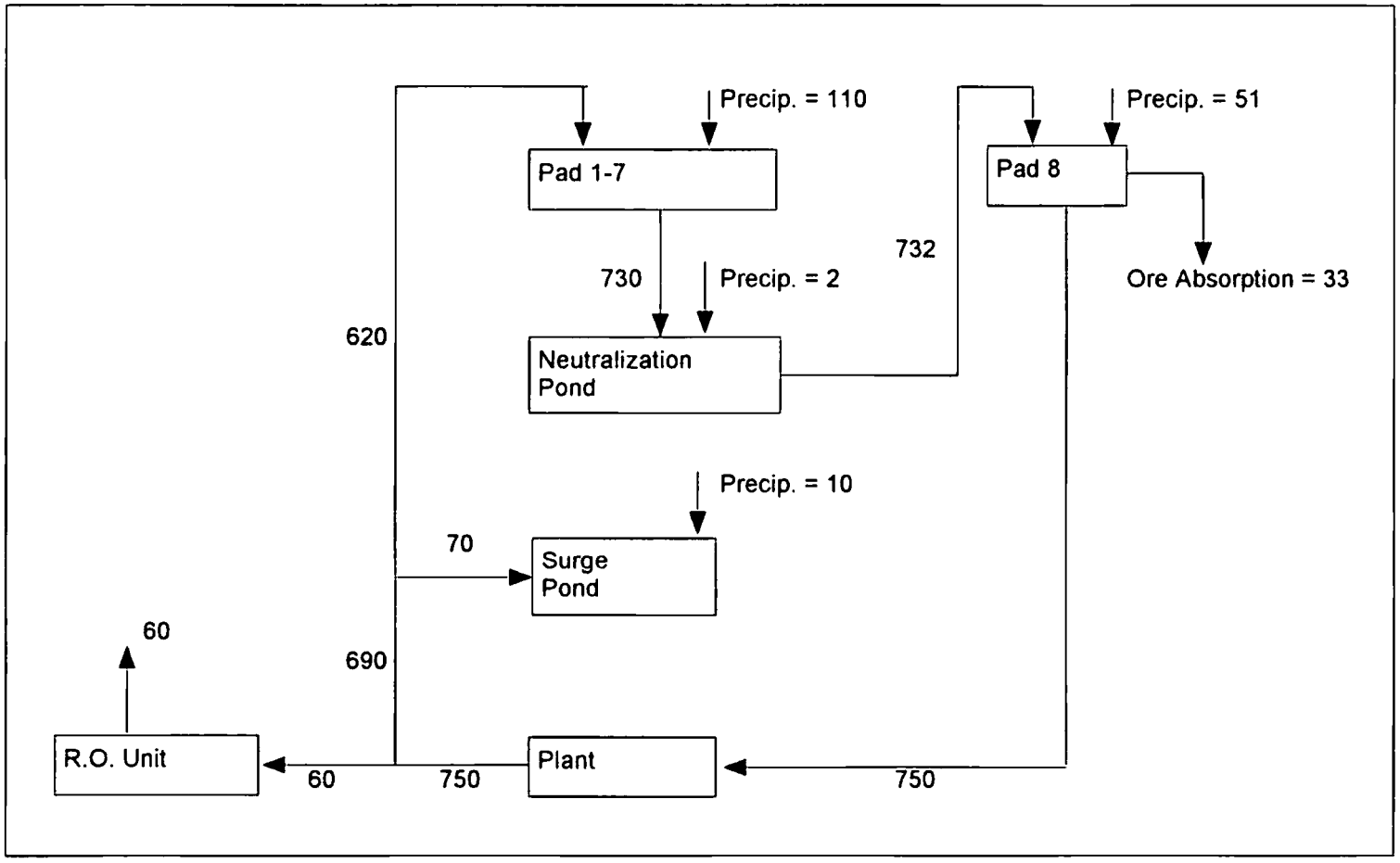
Recovery	

Sample	Crusher
Direct Fi	0.020
Date	04-Sep-96

Screen Size	Weight (grams)	WT. Ret. (%)	Grade Au (opt)	Au (oz)	Distribution (%)
2	0	0.0%			
1 1/2	0	0.0%			
1	225	2.4%	0.005	0.0001	0.6%
3/4	902	9.8%	0.012	0.0012	5.5%
1/2	1,767	19.1%	0.013	0.0025	11.6%
3/8	1,052	11.4%	0.010	0.0011	5.3%
1/4	1,229	13.3%	0.018	0.0024	11.2%
PAN	4,058	44.0%	0.032	0.0141	65.8%
Total	9,233	100.0%	0.021	0.0214	100.0%



BROHM MINING CORPORATION
GILT EDGE MINE
NOVEMBER to APRIL ACCUMULATED PRECIPITATION

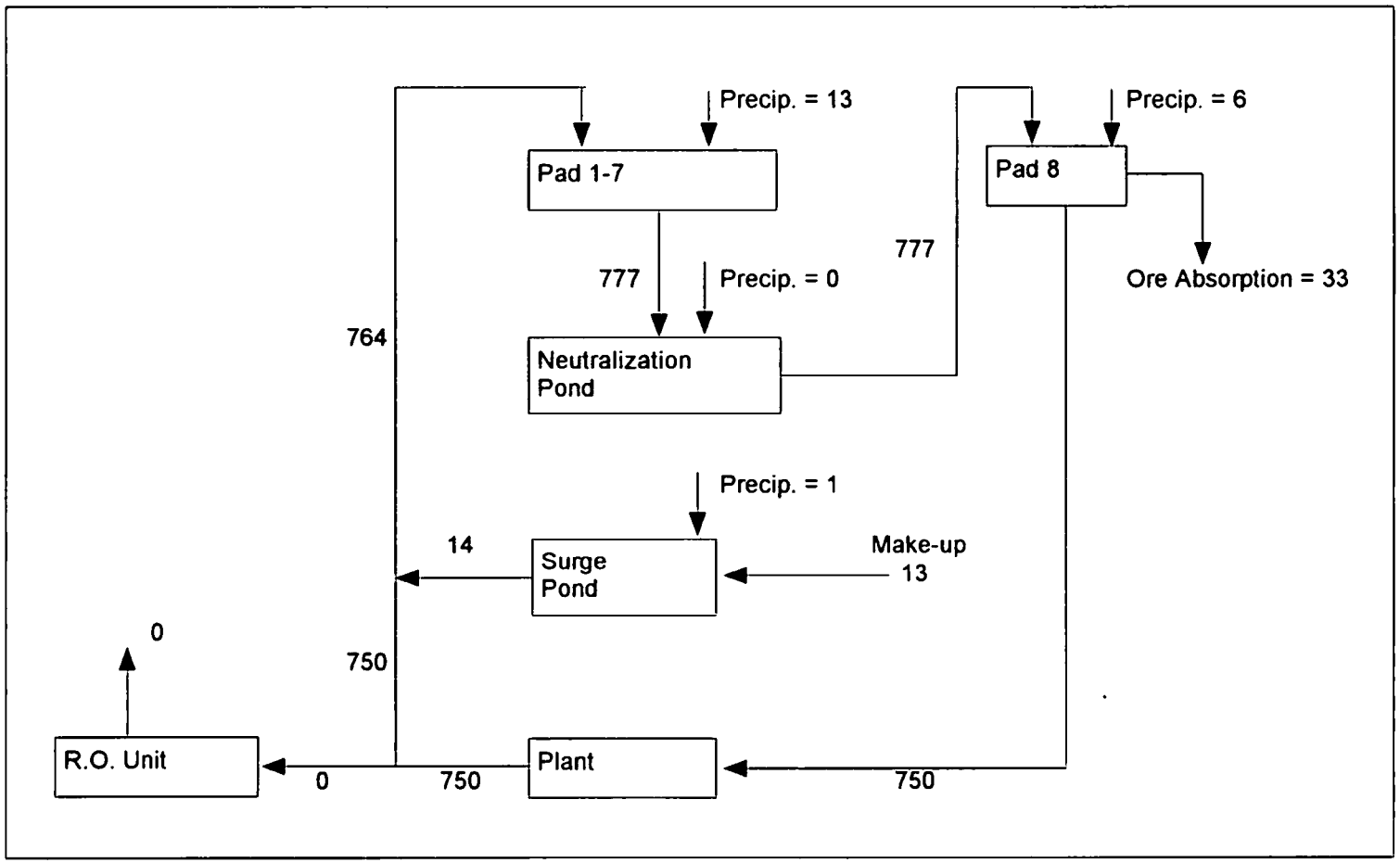


ASSUMPTIONS

Pad Area (1-7)	646,731	ft2
Pad Area (8)	298,349	ft2
Neut. Pond Area	13,570	ft2
Surge Pond Area	56,250	ft2
Production Rate	200,000	tons/mo
Ore Absorption	3	%
Precipitation	11.81	inches

Note: All flows in gpm.
The water balance simulates the worst case, based on the average annual precipitation records.

BROHM MINING CORPORATION
GILT EDGE MINE
DRY MONTH - SEPTEMBER



ASSUMPTIONS

Pad Area (1-7)	646,731	ft2
Pad Area (8)	298,349	ft2
Neut. Pond Area	13,570	ft2
Surge Pond Area	56,250	ft2
Production Rate	200,000	tons/mo
Ore Absorption	3	%
Precipitation	1.41	inches

Note: All flows in gpm.
The water balance simulates thedriest month,
based on the average annual precipitation records.

BROHM MINING CORPORATION
GILT EDGE MINE
GOLD INVENTORY - 1996

Date	Ounces Au Stacked Pad 1-7 ROM	Pad 1-7 Crushed	Pad 8 ROM	Pad 8 Crushed	Shipped Pad 1-7	Shipped Pad 8	Recovery (%) Pad 1-7	Recovery (%) Pad 8
Jan								
Feb								
Mar	160.70						0.0%	
Apr	857.70	964.25			480.78		24.2%	
May	12.30	2,822.77			969.60		30.1%	
Jun	851.00	3,306.90	105.19	408.71	2,605.00		45.2%	0.0%
Jul		2,250.26	601.00	1,254.00	1,966.52		53.6%	0.0%
Aug			310.40	4,630.02	1,820.41	2,189.30	69.9%	30.0%
Sep								
Oct								
Nov								
Dec								
Total	**1,881.70**	**9,344.18**	**1,016.59**	**6,292.73**	**7,842.31**	**2,189.30**	**69.9%**	**30.0%**